

52

SPLIT

DART AEROSPACE LTD	Work Order:	19666
Description: Fwd Crosstube	Part Number:	D2889
Drawing: D2889 Rev. B; D6005 Rev. A	Qty:	2 19
		Page 1 of 2

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller <i>Dwg. not required RF 02.11.05</i>	HA	03.09.19	19
2	PG	Issue P/O: <i>7005105</i> a) Extrude as per Dwg D6005 length = 180" (Ref. D6005-180) b) Material: 7075-T6/T6511 (WW-T-700/7 or QQ-A-225/9 or QQ-A-200/11)) Seamless aluminum tube c) Minimum ultimate tensile strength = 77ksi d) Minimum tensile yield strength = 66ksi e) Material certification required	U	03.09.22	19
3	RG	Receive and inspect for transit damage Ensure material certification attached	Q	04-01-05	22
4	QC6	Inspect dimensions as per Dwg D6005 and check 180" length	AB	04-02-11	22 PTO
5	FP	Acid etch and alodine as per QSI 005 4.1 Inside and outside of tube	Z	04-02-11	22
6	LG	Bend as per Dwg D2889 and Folio FT001 Sign Page 2	DP	04-11-22	2 PTO
7	QC6	Inspect dimensions per Dwg D2889 Sign Page 2			
8	LG	Deburr and Polish Sign Page 2	DP	04-11-22	2
9	FP	Acid etch and alodine as per QSI 005 4.1 Inside and outside of tube Sign Page 2	DP	04-11-22	2
10	QC5	Inspect work to Step 9 Sign Page 2			
11	ST	Identify and stock	DP	04-11-22	2
12	AC	Cost / part: <i>582.89</i>	Syr	05.01.21	2
13	DC	Close W/O <i>582.89</i> Inspect Level 21	HA	05.02.16	2

Rev	Date	Change	Revised By	Approved
A	99.05.31	New Issue, ECN 200	DM	
B	00.04.11	Remove Painting step	EC	
C	02.10.18	Re-format; Added spec	KJ	

RELEASED
02/10/30 RF

DART AEROSPACE LTD	Work Order:	19666
Description: Fwd Crosstube	Part Number:	D2889
Drawing: D2889 Rev. B; D6005 Rev. A	Qty:	19
		Page 2 of 2

W/O Step	A	B	C	D	E	F	G	H	I	J	K	L
6	EP 04/05/11	EP 04/05/11	EP 04/05/11	DP 04/11/22	DP 04/11/22							
7	EP 04/05/11	EP 04/05/11	EP 04/11/22	EP 04/11/22	EP 04/11/22							
8				DP 04/11/22	DP 04/11/22							
9				DP 04/11/26	DP 04/11/26							
10				EP 05/01/21	EP 05/01/21							

1 1

~~04/11/22~~

Save ED for D705-596-101
 EP 04/11/22 SPAN is 119.125" angles 57°; 57°

RELEASED
 02/10/30 RE

Abnahmeprüfbescheinigung 3.1 B - EN 10204

Inspection Certificate 3.1 B - EN 10204 I Certificat de Reception 3.1 B - EN 10204

Kunde: Dart Aerospace Ltd.

Client:

1270 Aberdeen Street
K6A1K7 Hawkesbury, ON Canada

Zeugnisnummer:

Cert No.: / No. du certificat:

Bestellnummer: 2005668

Order No. / No. de commande

Auftrag: 6438/1

Our Reference/Notre Reference:

Produkt:

Product / Produit:

Tubes seamless extruded

Spezifikation:

Specification:

QQA 200/11e, Tol. Acc to ASTM B 210

Werkstoff:

Alloy/Alliage:

7075

Zustand:

Temper/État

T 6511

Abmessung

Size / Dimension

69,850 mm x 50,790 mm x 9,530 mm x 4572,00 mm
Article D6005-180 2.750" x 0.375"

Kennzeichnung

Marking/Marquage:

Cert No.405/03-AWU-7075-T6511-Cast No.1049-QQA-200/11E-2.750"OD X0.375"Wall-Heat No.2974-Lot6438-1-1-P.O.2005668

Lieferung:

Delivered Material / Matériel délivré:

pcs.

lbs

22

1120

1. Chemische Analyse

Chemical Analysis / analyse chimique

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni
Charge/ min.			1,2		2,1	0,18	5,1						
Cast No. max.	0,40	0,50	2,0	0,30	2,9	0,28	6,1	0,20					
1049/03	0,124	0,239	1,361	0,057	2,372	0,192	5,683	0,037	0,004	0,0153	0,0001	0,0013	0,0030

Hydrogen content:

0,13

ccm/100 g Al

Elemente ohne Angabe < 0,01 % / Elements without indication < 0,01 %

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) Ksi	yield (Rp0,2) Ksi	elongation 2" %	elongation A %	Hardness HB	
min.	77,0	66,0				
max.						
1	84,825	78,155	9,0		146	
2	86,275	80,040	8,0		157	

**Ergebnis der
Prüfungen:**

Es wird bestätigt, daß die Lieferung geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht

Test-results:

We confirm that the delivery has been tested and applies to the agreements made on receipt of the order



ALUnna

Aluminiumwerk Unna AG · Uelzener Weg 36 · D-59425 Unna

Dart Aerospace Ltd.
1270 Aberdeen Street
CDN Hawkesbury, ONT, K6A1K7

Aluminiumwerk Unna AG
Uelzener Weg 36 · D-59425 Unna
Postfach 11 46 · D-59401

fon +49 (0) 23 03-206 - 0
fax +49 (0) 23 03-206- 116
info@alu-unna.de
www.alu-unna.de

page: 1
date: 28.11.2003
customer 40980

delivery note

7620

your PO dated: 22.09.2003
your PO No.: 2005668
AWU PO: 6438

contact: Petra Eisenblätter
Tel.: + (303) 755 5672
Fax: + (303) 755 5936
representative: CLAUS J. BETTER

CARRIER: Senator

Your VAT No.:
AWU VAT No.: DE177869055

We supply acc. to our delivery terms and conditions:

item	quantity	unit	net kgs
------	----------	------	---------

001	22,000	PC	
-----	--------	----	--

AWU article: 16538 / Customer article: D6005-180 2.750 x 0.375 x 180
/Tariff no. 76082091

product: TUBES / seamless extruded / EN AW-7075 / round

condition: T 6511 / QQA 200/11E

outer diameter:	2,750 INCH Tol.	+0,012	-0,012
tol. for mean OD		+0,006	-0,006
inner diameter:	2,000 INCH		
wall thickness:	0,375 INCH Tol.	+0,037	-0,037
fixed length	180,000 INCH Tol.	+0,125	

test report acc. to EN 10204/3.1B / RM 531 / Rp0,2: 455

straightness 0,01 INCH / 1 FEET / RMS outer 25

tol. on quantity +10 % -10 %

2.750" OD 0.375" Wall, 180" lengths

Part Number D6005-180 crosstube

Surface Finish max. RMS 25

Tolerances per ASTM B210

Straightness 0.010" deviation /12" length

Outside surface: max. defects up to 0.005" (longitudinally)

Min. ultimate tensile strength 77 ksi

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector	
			Initial Design Mgr	Action Description Design Mgr	Sign & Date				
05.01.19	6	WIDTH = 108" HEIGHT = 84.12" (INSTEAD OF 33.38") 1 XTUBE SCRAP. DZ889 B19666	#	UNACCEPTABLE GIVE TO ENGR. FOR DEVELOPMENT TESTING. FIRST TIME BEND FOR DAN PARQUETTE.	ERIC DOWNING DID BEND WITH DAN HELPING. DP	05.02.06	#	05.01.19	05.02.06
		DZ889							

Part No: ~~DZ05-596-105~~ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: DP Date: 05/02/16

NOTE: Date & initial all entries

QA: N/C Closed: _____

Date: _____